UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

January 12, 2012

OFFICE OF
SOLID WASTE AND
EMERGENCY RESPONSE

VIA E-MAIL

Mr. Thomas L. Hernandez,
Vice President Energy Supply
TECO Energy
702 North Franklin Street
Tampa, Florida 33602

Re: Request for Action Plan regarding Tampa Electric Co - Big Bend Power Station

Dear Mr. Hernandez,

On March 1, 2011 the United States Environmental Protection Agency ("EPA") and its engineering contractors conducted a coal combustion residual (CCR) site assessment at the Tampa Electric Co - Big Bend Power Station facility. The purpose of this visit was to assess the structural stability of the impoundments or other similar management units that contain “wet” handled CCRs. We thank you and your staff for your cooperation during the site visit. Subsequent to the site visit, EPA sent you a copy of the draft report evaluating the structural stability of the units at the Tampa Electric Co - Big Bend Power Station facility and requested that you submit comments on the factual accuracy of the draft report to EPA. Your comments were considered in the preparation of the final report.

The final report for the Tampa Electric Co - Big Bend Power Station facility is enclosed. This report includes a specific condition rating for each CCR management unit and recommendations and actions that our engineering contractors believe should be undertaken to ensure the stability of the CCR impoundment(s) located at the Tampa Electric Co - Big Bend Power Station facility. These recommendations are listed in Enclosure 2.

Since these recommendations relate to actions which could affect the structural stability of the CCR management unit(s) and, therefore, protection of human health and the environment, EPA believes their implementation should receive the highest priority. Therefore, we request that you inform us on how you intend to address each of the recommendations found in the final report. Your response should include specific plans and schedules for implementing each of the recommendations. If you will not implement a recommendation, please provide a rationale. Please provide a response to this request by February 13, 2012. Please send your response to:

Mr. Stephen Hoffman
U.S. Environmental Protection Agency (5304P)
1200 Pennsylvania Avenue, NW

Washington, DC 20460

If you are using overnight of hand delivery mail, please use the following address:

Mr. Stephen Hoffman
U.S. Environmental Protection Agency
Two Potomac Yard
2733 S. Crystal Drive
5th Floor, N-5838
Arlington, VA 22202-2733

You may also provide a response by e-mail to hoffman.stephen@epa.gov, kohler.james@epa.gov, and englander.jana@epa.gov.

You may assert a business confidentiality claim covering all or part of the information requested, in the manner described by 40 C. F. R. Part 2, Subpart B. Information covered by such a claim will be disclosed by EPA only to the extent and only by means of the procedures set forth in 40 C.F.R. Part 2, Subpart B. If no such claim accompanies the information when EPA receives it, the information may be made available to the public by EPA without further notice to you. If you wish EPA to treat any of your response as "confidential" you must so advise EPA when you submit your response.

EPA will be closely monitoring your progress in implementing the recommendations from these reports and could decide to take additional action if the circumstances warrant.

You should be aware that EPA will be posting the report for this facility on the Agency website shortly.

Given that the site visit related solely to structural stability of the management units, this report and its conclusions in no way relate to compliance with RCRA, CWA, or any other environmental law and are not intended to convey any position related to statutory or regulatory compliance.

Please be advised that providing false, fictitious, or fraudulent statements of representation may subject you to criminal penalties under 18 U.S.C. § 1001.

If you have any questions concerning this matter, please contact Mr. Hoffman in the Office of Resource Conservation and Recovery at (703) 308-8413. Thank you for your continued efforts to ensure protection of human health and the environment.

Sincerely,
/Suzanne Rudzinski/, Director
Office of Resource Conservation and Recovery

Enclosure

Enclosure 2

Tampa Electric Co - Big Bend Power Station Recommendations (from the final assessment report)

1.0 CONCLUSIONS AND RECOMMENDATIONS

1.1 CONCLUSIONS

Conclusions are based on visual observations from a one-day site visit, March 1, 2011 and review of technical documentation provided by Tampa Electric Company (TECO). It should be noted that there were four (4) ponds observed as part of this assessment. There were 4 additional ponds identified in TECO's survey response (Long Term Fly Ash Pond, Settling Pond, North and South Recycling Ponds) that were not included in these analyses. The Long Term Fly Ash Pond was identified as a future pond site not currently receiving coal combustion residuals. The other 3 ponds are for process water recycling and not used for coal combustion residue (CCR) management. TECO did state that there may be some carryover of de minimus amounts of solids in these units by virtue of the fact that they receive contact runoff from process areas, but they do not receive sluiced coal combustion residuals. Two (2) of the assessed ponds receive bottom ash which is a fully recycled product at this facility. These were included in the assessment because, until the periodic recovery operation is underway (when they are drained and excavated), they function as impoundments for water and ash. The other two (2) assessed ponds receive economizer ash which is not recycled. These ponds are permanent disposal sites for the ash. One (1) of these ponds is currently inactive and undergoing closure activities. All sluice water is part of a closed loop recycle system at this facility. Sluice water is pumped to and from the ponds and used in the plant as process water.

1.1.1 Conclusions Regarding the Structural Soundness of the Management Unit(s)

The dike embankments appear to be structurally sound based on Dewberry engineers' observations during the site visit. However, a review of the engineering data provided by the owner's technical staff is inadequate and critical information was not provided. Dewberry notes that the plant is in a non-seismic zone, rated for 0 ground acceleration, therefore only static (normal) loading analyses are necessary.

1.1.2 Conclusions Regarding the Hydrologic/Hydraulic Safety of the Management Unit(s)

No hydrologic or hydraulic analyses were provided to Dewberry. TEC has contracted with an engineering firm to perform hydraulic analyses of the ponds. TEC will make the results available to USEPA upon completion of the studies.

1.1.3 Conclusions Regarding the Adequacy of Supporting Technical Documentation

The supporting technical documentation is inadequate. Engineering documentation reviewed is referenced in Appendix A of the final report. The following documents were not provided:

- Hydrologic/Hydraulic Analysis
- Slope Stability analysis for static (normal) loading conditions using actual data instead of design parameters for the dike
- Surveillance, monitoring and inspection reports

1.1.4 Conclusions Regarding the Description of the Management Unit(s)

The description of the management unit provided by the owner was an accurate representation of what Dewberry observed in the field.

1.1.5 Conclusions Regarding the Field Observations

Dewberry staff was provided access to all areas in the vicinity of the management unit required to conduct a thorough filed observation. The visible parts of the embankment dikes were observed to have no signs of overstress, significant settlement, shear failure, or other signs of instability. Embankments appear structurally sound. There are no apparent indications of unsafe conditions.

There was a minor tear in the South Economizer Ash Pond liner that needs to be repaired (this pond is inactive and closure procedures are underway). TEC indicated its liner repair and installation contractor will perform this repair in the near future.

1.1.6 Conclusions Regarding the Adequacy of Maintenance and Methods of Operation

The current maintenance and methods of operation appear to be adequate for the ash management units. There was no evidence of significant embankment repairs or prior releases observed during the field inspection.

1.1.7 Conclusions Regarding the Adequacy of the Surveillance and Monitoring Program

The surveillance program appeared to be inadequate. The management unit dikes are not instrumented. There is no established surveillance program other than staff visually observing the units daily. No documentation of past inspections or standard inspection procedures were provided. However, TEC informed USEPA that it is implementing a formal dam safety program for the Big Bend impoundments that is in conformance with the Florida Department of Environmental Protection Rule Chapter 62-672, F.A.C. in 2012. This program will include daily visual inspections and documentation of dam conditions.

1.1.8 Classification Regarding Suitability for Continued Safe and Reliable Operation

The S. Bottom Ash Pond, N. Bottom Ash Pond, N. Economizer Ash Pond, and S. Economizer Ash Pond are rated FAIR for continued safe and reliable operation due to the lack of supporting technical documentation. Based on the visual observation of the ash ponds they appeared to be in satisfactory condition, but without the documentation requested in section 1.2.3 below, there is no way of making an accurate assessment of the unit.

1.2 RECOMMENDATIONS

Dewberry has made a number of recommendations for this facility. During the completion of this report we received updated information from the owner's representative stating that for the recommended maintenance and repairs 'a work order has been initiated by the plant and the repair will be completed by mid- December 2011' and further for the recommended studies 'this will be performed in the 1st quarter of 2012'.

1.2.1 Recommendations Regarding the Structural Stability

The following issues need to be addressed with routine maintenance:

- Remediate the two minor depressions along the crest of the South Bottom Ash Pond;
- Repair the shear failure of the liner within the South Economizer Ash Pond.

1.2.2 Recommendations Regarding the Hydrologic/Hydraulic Safety

Hydrologic/Hydraulic analysis should be provided.

1.2.3 Recommendations Regarding the Supporting Technical Documentation

Supporting technical documentation is insufficient. The following documents need to be provided:

- Hydrologic/Hydraulic analyses (We understand the analyses are being performed).

- Slope stability analyses for steady state (normal) conditions for current (as-built) conditions of the embankments
- Documented inspection procedures

1.2.4 Recommendations Regarding the Field Observations

The following recommendations have been made based on the field observations:

- Repair the shear failure in the liner of the South Economizer Ash Pond.
- Maintain and prevent further expansion of woody vegetation onto the downstream slope of South Bottom Ash Pond;
- Remediate two minor depressions in South Bottom Ash Pond crest.

1.2.5 Recommendations Regarding the Maintenance and Methods of Operation

Where woody brush has established on the downstream slope of the South Bottom Ash Pond, maintain and prevent further expansion onto the slope. Repair liner on South Economizer Ash Pond.

1.2.6 Recommendations Regarding the Surveillance and Monitoring Program

Field observations should be recorded and documented at least on a monthly to quarterly basis. An annual observation should be performed and documented by a Professional Engineer licensed in the State of Florida. TECO commented that a new surveillance and monitoring program will be implemented in 2012 that addresses the above recommendations.

1.2.7 Recommendations Regarding Continued Safe and Reliable Operation

TEC is in the process of addressing the recommendations listed in this section. Continued safe and reliable operation should be enhanced upon completion of the repairs, changes in operation and maintenance procedures, confirmation that the pond will handle hydraulic loads under design precipitation/flood conditions, and completion of new static loading structural stability calculations demonstrating minimum Factors of Safety are met for current dike conditions.